

METHOD AND SYSTEM FOR REDUCING POWER CONSUMPTION IN DIGITAL CIRCUITRY USING CHARGE REDISTRIBUTION CIRCUITS**ABSTRACT OF THE DISCLOSURE**

A method and system for reducing power consumption in digital circuits using charge redistribution, comprising a plurality of signal lines, an intermediate floating virtual source/sink, and a charge redistribution circuit connected to each said signal line that isolates said line from its source and connects it to the intermediate floating virtual source/sink during an idle period prior to a change of state.

This charge redistribution provides steady state statistical independent advantage due to charge recycling without inserting extra complimentary line.